

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:15:26 ON 20 APR 2005

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 08:15:52 ON 20 APR 2005
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s peg or polyethylene glycol

FILE 'MEDLINE'

8959 PEG

33678 POLYETHYLENE

22000 GLYCOL

9086 POLYETHYLENE GLYCOL

(POLYETHYLENE(W)GLYCOL)

L1 14753 PEG OR POLYETHYLENE GLYCOL

FILE 'SCISEARCH'

14973 PEG

49789 POLYETHYLENE

36174 GLYCOL

11455 POLYETHYLENE GLYCOL

(POLYETHYLENE(W)GLYCOL)

L2 21749 PEG OR POLYETHYLENE GLYCOL

FILE 'LIFESCI'

2228 PEG

4480 "POLYETHYLENE"

5906 "GLYCOL"

3000 POLYETHYLENE GLYCOL

("POLYETHYLENE" (W) "GLYCOL")

L3 4068 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOTECHDS'

6044 PEG

3945 POLYETHYLENE

4515 GLYCOL

3036 POLYETHYLENE GLYCOL

(POLYETHYLENE(W)GLYCOL)

L4 7723 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOSIS'

11854 PEG

23925 POLYETHYLENE

32559 GLYCOL

14532 POLYETHYLENE GLYCOL

(POLYETHYLENE(W)GLYCOL)

L5 20621 PEG OR POLYETHYLENE GLYCOL

FILE 'EMBASE'

8915 PEG

18670 "POLYETHYLENE"

28246 "GLYCOL"

8533 POLYETHYLENE GLYCOL

("POLYETHYLENE" (W) "GLYCOL")

L6 14197 PEG OR POLYETHYLENE GLYCOL

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FILE 'HCAPLUS'
    31703 PEG
    323028 POLYETHYLENE
    328789 GLYCOL
    90639 POLYETHYLENE GLYCOL
        (POLYETHYLENE(W)GLYCOL)
L7      108449 PEG OR POLYETHYLENE GLYCOL

FILE 'NTIS'
    321 PEG
    5591 POLYETHYLENE
    1894 GLYCOL
    253 POLYETHYLENE GLYCOL
        (POLYETHYLENE(W)GLYCOL)
L8      499 PEG OR POLYETHYLENE GLYCOL

FILE 'ESBIOBASE'
    3672 PEG
    4796 POLYETHYLENE
    6391 GLYCOL
    3005 POLYETHYLENE GLYCOL
        (POLYETHYLENE(W)GLYCOL)
L9      5248 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOTECHNO'
    2816 PEG
    4665 POLYETHYLENE
    7260 GLYCOL
    3167 POLYETHYLENE GLYCOL
        (POLYETHYLENE(W)GLYCOL)
L10     4868 PEG OR POLYETHYLENE GLYCOL

FILE 'WPIDS'
    15802 PEG
    197943 POLYETHYLENE
    109036 GLYCOL
    26705 POLYETHYLENE GLYCOL
        (POLYETHYLENE(W)GLYCOL)
L11     39735 PEG OR POLYETHYLENE GLYCOL

TOTAL FOR ALL FILES
L12     241910 PEG OR POLYETHYLENE GLYCOL

=> s l12(5a)crosslink?(5a) (protein# or enzyme#)
FILE 'MEDLINE'
    10817 CROSSLINK?
    1759365 PROTEIN#
    730058 ENZYME#
L13     1 L1 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'SCISEARCH'
    28041 CROSSLINK?
    1400079 PROTEIN#
    459972 ENZYME#
L14     3 L2 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'LIFESCI'
    4165 CROSSLINK?
    522211 PROTEIN#
    197816 ENZYME#
L15     1 L3 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'BIOTECHDS'

```

2898 CROSSLINK?
136948 PROTEIN#
122684 ENZYME#
L16 4 L4 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'BIOSIS'
14929 CROSSLINK?
1669165 PROTEIN#
772072 ENZYME#
L17 0 L5 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'EMBASE'
11291 CROSSLINK?
1410253 PROTEIN#
787204 ENZYME#
L18 1 L6 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'HCAPLUS'
249495 CROSSLINK?
2014283 PROTEIN#
929021 ENZYME#
L19 22 L7 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'NTIS'
3105 CROSSLINK?
18093 PROTEIN#
12052 ENZYME#
L20 0 L8 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'ESBIOBASE'
4417 CROSSLINK?
655527 PROTEIN#
226276 ENZYME#
L21 1 L9 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'BIOTECHNO'
4956 CROSSLINK?
653195 PROTEIN#
353854 ENZYME#
L22 1 L10 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

FILE 'WPIDS'
77310 CROSSLINK?
142087 PROTEIN#
78914 ENZYME#
L23 4 L11 (5A)CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

TOTAL FOR ALL FILES
L24 38 L12 (5A) CROSSLINK?(5A) (PROTEIN# OR ENZYME#)

=> dup rem l24
PROCESSING COMPLETED FOR L24
L25 32 DUP REM L24 (6 DUPLICATES REMOVED)

=> d tot

L25 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Crosslinking of proteins and other biomolecules and organic molecules
using metal coordination complexes and oxidizing agents
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
IN Stewart, Russell John; Kiser, Patrick Franklin; Staynor, Richard Scott
AN 2005:182803 HCAPLUS
DN 142:276436

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005019421	A2	20050303	WO 2004-US25958	20040811
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

L25 ANSWER 2 OF 32 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI Knot pusher for closing suture sites in body tissue, comprises body that engages suture knot, and fitting for introducing liquid closure material for discharge.

PI	US 2003040760	A1	20030227 (200358)*	37	A61B017-04
	WO 2004012582	A2	20040212 (200413)	EN	A61B000-00
	RW:	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW			
	W:	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW			
	AU 2003269940	A1	20040223 (200453)		A61B017-04
IN	ADDIS, B; BROWNE, D; CHEUNG, D; HNOJEWYJ, O				

L25 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Chemical modification of enzymes to improve their catalytic performance
 SO Fenzi Cuihua (2002), 16(6), 475-480
 CODEN: FECUEN; ISSN: 1001-3555
 AU Liu, Jian-zhong; Song, Hai-yan; Weng, Li-ping; Ji, Liang-nian
 AN 2003:170509 HCAPLUS
 DN 138:381181

L25 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of protein-based PEG hydrogels
 SO PCT Int. Appl., 63 pp.
 CODEN: PIXXD2
 IN Faure, Marie-pierre; Pinard, Karl; Brisson, Jean-francois
 AN 2001:747876 HCAPLUS
 DN 135:294022

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001074928	A1	20011011	WO 2001-CA482	20010404
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1280849	A1	20030205	EP 2001-923426	20010404
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

L25 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Delivery systems using preformed biodegradable polymer compositions including crosslinked proteins

SO PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 IN Truong, Myhanh T.; Pournoor, Kaveh; Choi, Hye-Ok; Velasquez, David J.;
 Ferber, Richard H.; Bernatchez, Stephanie F.
 AN 2001:617791 HCAPLUS
 DN 135:200442

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001060335	A2	20010823	WO 2001-US5020	20010216
	WO 2001060335	A3	20020418		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2398668	AA	20010823	CA 2001-2398668	20010216
	US 2002009492	A1	20020124	US 2001-784934	20010216
	US 6576263	B2	20030610		
	BR 2001008471	A	20021029	BR 2001-8471	20010216
	EP 1257257	A2	20021120	EP 2001-910817	20010216
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003522780	T2	20030729	JP 2001-559433	20010216

L25 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Peptide and protein PEGylation. A review of problems and solutions
 SO Biomaterials (2001), 22(5), 405-417
 CODEN: BIMADU; ISSN: 0142-9612
 AU Veronese, F. M.
 AN 2001:23413 HCAPLUS
 DN 134:315938

L25 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Protein release from physically crosslinked hydrogels of the PLA/PEO/PLA triblock copolymer-type
 SO Biomaterials (2001), 22(4), 363-369
 CODEN: BIMADU; ISSN: 0142-9612
 AU Molina, I.; Li, S.; Martinez, M. B.; Vert, M.
 AN 2000:891018 HCAPLUS
 DN 134:285525

L25 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Modification of Oligo(poly(ethylene glycol) fumarate) Macromer with a GRGD Peptide for the Preparation of Functionalized Polymer Networks
 SO Biomacromolecules (2001), 2(1), 255-261
 CODEN: BOMAF6; ISSN: 1525-7797
 AU Jo, Seongbong; Shin, Heungsoo; Mikos, Antonios G.
 AN 2001:36321 HCAPLUS
 DN 134:252975

L25 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Protein-containing hydrogels
 SO Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW
 IN Ettner, Norbert; Schink, Michael; Schreiber, Joerg; Meier, Wolfgang; Sauer, Marc
 AN 2000:553213 HCAPLUS
 DN 133:155497

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 1025860	A2	20000809	EP 2000-100556	20000112
	EP 1025860	A3	20020619		
	EP 1025860	B1	20050112		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19903655	A1	20000810	DE 1999-19903655	19990129

L25 ANSWER 10 OF 32 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Barrier material, to close vascular puncture sites to prevent bleeding after surgery or trauma, comprises matrix of protein and polymer.

PI WO 2000012018 A1 20000309 (200020)* EN 118 A61B017-36

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SL SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
UA UG US UZ VN YU ZW

AU 9955870 A 20000321 (200031)

EP 1107813 A1 20010620 (200135) EN A61M037-00

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

US 2001018598 A1 20010830 (200151) A61D001-00

US 2001031948 A1 20011018 (200166) A61M005-178

US 2002032463 A1 20020314 (200222) A61D001-00

US 6371975 B2 20020416 (200232) A61B017-08

JP 2002525137 W 20020813 (200267) 118 A61L031-00

US 6458147 B1 20021001 (200268) A61B017-04

US 2002161399 A1 20021031 (200274) A61D001-00

US 6475182 B1 20021105 (200276) A61M037-00

AU 759991 B 20030501 (200339) A61B017-36

CA 2435050 A1 20000309 (200374) EN A61L024-04

IN CRUISE, G M; HNOJEWYJ, O; EDWARDS, S D; GOUGH, E

L25 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Control and Prediction of Gelation Kinetics in Enzymatically Cross-Linked Poly(ethylene glycol) Hydrogels

SO Macromolecules (2000), 33(15), 5476-5480
CODEN: MAMOBX; ISSN: 0024-9297

AU Sperinde, Jeffrey J.; Griffith, Linda G.

AN 2000:453418 HCAPLUS

DN 133:177591

L25 ANSWER 12 OF 32 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI Photoimmobilization of organophosphorus-hydrolase within a PEG-based hydrogel;
effect of immobilization on **crosslinked polyethylene glycol**-based hydrogel support on **enzyme** activity and stability

SO Biotechnol.Bioeng.; (1999) 65, 5, 580-88
CODEN: BIBIAU ISSN: 0006-3592

AU Andreopoulos F M; Roberts M J; Bentley M D; Harris J M; Beckman E J;
*Russell A J

AN 1999-14977 BIOTECHDS

L25 ANSWER 13 OF 32 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI Optimization of Pseudomonas cepacia lipase preparations for catalysts in organic solvents;
transesterification

SO Biotechnol.Bioeng.; (1999) 62, 5, 554-61
CODEN: BIBIAU ISSN: 0006-3592

AU Secundo F; Spadaro S; Carrea G; Overbeeke P L

AN 1999-03096 BIOTECHDS

L25 ANSWER 14 OF 32 MEDLINE on STN DUPLICATE 1
 TI Chemical modification of enzymes for enhanced functionality.
 SO Current opinion in biotechnology, (1999 Aug) 10 (4) 324-30. Ref: 41
 Journal code: 9100492. ISSN: 0958-1669.
 AU DeSantis G; Jones J B
 AN 1999380784 MEDLINE

L25 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Crosslinked protein crystals as universal separation media
 SO PCT Int. Appl., 115 pp.
 CODEN: PIXXD2
 IN Margolin, Alexey L.; Vilenchik, Lev Z.
 AN 1998:208450 HCAPLUS
 DN 128:267960

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9813119	A1	19980402	WO 1997-US17167	19970924
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9747381	A1	19980417	AU 1997-47381	19970924

L25 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Non-crosslinked protein particles for therapeutic and diagnostic use
 SO U.S., 21 pp., Cont.-in-part of U.S. 5,616,311.
 CODEN: USXXAM
 IN Yen, Richard C. K.
 AN 1998:175365 HCAPLUS
 DN 128:235150

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5725804	A	19980310	US 1995-471650	19950606
	US 5308620	A	19940503	US 1992-959560	19921013
	US 5616311	A	19970401	US 1994-212546	19940314
	CA 2220895	AA	19961212	CA 1996-2220895	19960604
	WO 9639128	A1	19961212	WO 1996-US9458	19960604
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	AU 9661002	A1	19961224	AU 1996-61002	19960604
	EP 831793	A1	19980401	EP 1996-918313	19960604
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
	JP 11507630	T2	19990706	JP 1996-501772	19960604
	US 6391343	B1	20020521	US 1998-952765	19980410
	US 2002142046	A1	20021003	US 2002-42834	20020108

L25 ANSWER 17 OF 32 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
 TI Enhancement of acid proteinase production by the fungus Humicola lutea 120-5 immobilized in crosslinked poly(vinyl alcohol) mixed with poly(ethylene glycol);
 acid protease production following fungus immobilization
 SO Process Biochem.; (1998) 33, 7, 725-28
 CODEN: PBCHE5 ISSN: 0032-9592
 AU Alekseiva P; Petricheva E; Konstatinov H
 AN 1999-08447 BIOTECHDS

L25 ANSWER 18 OF 32 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI MECHANICAL-PROPERTIES OF SOY PROTEIN-POLYETHYLENE RIBBON AND FILM
EXTRUDATES
SO TRANSACTIONS OF THE ASAE, (MAR/APR 1996) Vol. 39, No. 2, pp. 611-615.
ISSN: 0001-2351.
AU GHORPADE V M; HANNA M A (Reprint)
AN 96:358795 SCISEARCH

L25 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Crosslinked poly(ethylene glycol) networks as reservoirs for protein
delivery
SO Journal of Applied Polymer Science (1996), 59(3), 459-66
CODEN: JAPNAB; ISSN: 0021-8995
AU Bromberg, Lev
AN 1995:1004718 HCAPLUS
DN 124:127031

L25 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Sulfonamide derivatives and their use
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
IN Baldwin, John J.; Ohlmeyer, Michael H. J.; Henderson, Ian
AN 1995:951322 HCAPLUS
DN 123:350246

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9524186	A1	19950914	WO 1995-US3223	19950310
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2183428	AA	19950914	CA 1995-2183428	19950310
	AU 9519991	A1	19950925	AU 1995-19991	19950310
	AU 690656	B2	19980430		
	EP 751765	A1	19970108	EP 1995-913701	19950310
	EP 751765	B1	20030507		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09510442	T2	19971021	JP 1995-523709	19950310
	AT 239680	E	20030515	AT 1995-913701	19950310
	ES 2199247	T3	20040216	ES 1995-913701	19950310
	US 5618825	A	19970408	US 1995-482489	19950607
	US 5756810	A	19980526	US 1996-714065	19960911

L25 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Direct visualization of enzyme inhibitors using a portion mixing inhibitor
library containing a quenched fluorogenic peptide substrate. Part 1.
Inhibitors for subtilisin Carlsberg
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
Bio-Organic Chemistry (1995), (12), 1591-6
CODEN: JCPRB4; ISSN: 0300-922X
AU Meldal, Morten; Svendsen, Ib
AN 1995:647239 HCAPLUS
DN 123:78136

L25 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Densely crosslinked polymer networks of poly(ethylene glycol) in
trimethylolpropane triacrylate for cell-adhesion-resistant surfaces
SO Journal of Biomedical Materials Research (1995), 29(2), 207-15
CODEN: JBMRBG; ISSN: 0021-9304
AU Drumheller, Paul D.; Hubbell, Jeffrey A.
AN 1995:348766 HCAPLUS
DN 122:114853

L25 ANSWER 23 OF 32 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI New active carbonate(s) of polyalkylene oxide(s) - for modification of
 polypeptide(s).
 PI US 5324844 A 19940628 (199425)* 10 C07D207-46
 IN ZALIPSKY, S

L25 ANSWER 24 OF 32 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI INTERACTIONS OF ENZYMES AND FUNGI WITH CROSS-LINKED POLYURETHANES PREPARED
 FOR BIOMEDICAL APPLICATIONS
 SO MEDICAL PROGRESS THROUGH TECHNOLOGY, (1994) Vol. 20, No. 3-4, pp. 261-270.
 ISSN: 0047-6552.
 AU JAYABALAN M (Reprint); SHUNMUGAKUMAR N
 AN 95:30482 SCISEARCH

L25 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Stabilization of **protein** drug (catalase) by **crosslinking**
 to human serum albumin with **polyethylene glycol**
 SO (1993) 150 pp. Avail.: Univ. Microfilms Int., Order No. DA9511739
 From: Diss. Abstr. Int. B 1995, 55(12) 5355
 AU Lo, Shi-Lung
 AN 1995:668067 HCAPLUS
 DN 123:93022

L25 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Enzyme electrode with redox enzyme and polymer with multiple redox centers
 SO U.S., 15 pp.
 CODEN: USXXAM
 IN Gregg, Brian A.; Heller, Adam
 AN 1994:129005 HCAPLUS
 DN 120:129005

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262035	A	19931116	US 1989-389226	19890802
US 5264104	A	19931123	US 1992-880760	19920508
US 5264105	A	19931123	US 1993-32806	19930317
WO 9323744	A1	19931125	WO 1993-US2588	19930319
W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9339274	A1	19931213	AU 1993-39274	19930319
EP 639268	A1	19950222	EP 1993-908458	19930319
R: DE, DK, FR, GB, IT				
JP 07506674	T2	19950720	JP 1993-520191	19930319

L25 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Capillary column
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 IN Mizuno, Masako; Tochigi, Kenji
 AN 1994:338112 HCAPLUS
 DN 120:338112

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05288716	A2	19931102	JP 1992-88909	19920409

L25 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Protein crosslinking reagents cleavable within acidified intracellular
 vesicles
 SO U. S. Pat. Appl., 54 pp. Avail. NTIS Order No. PAT-APPL-6-204 163.
 CODEN: XAXXAV
 IN Neville, D. M.; Srinivasachar, K.

AN 1990:112047 HCAPLUS

DN 112:112047

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 204163	A0	19890315	US 1988-204163	19880601
	US 5066490	A	19911119		
	WO 8911867	A1	19891214	WO 1989-US2349	19890531
	W: AU, JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8937684	A1	19900105	AU 1989-37684	19890531
	AU 620417	B2	19920220		
	EP 417188	A1	19910320	EP 1989-906910	19890531
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 03502098	T2	19910516	JP 1989-506589	19890531

L25 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Cross-linking of enzymes to nylon using bis-O-tosylates of diols, glycols, and sugars

SO Annals of the New York Academy of Sciences (1988), 542(Enzyme Eng. 9), 165-8

CODEN: ANYAA9; ISSN: 0077-8923

AU Sundaram, P. V.

AN 1989:453247 HCAPLUS

DN 111:53247

L25 ANSWER 30 OF 32 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI Immobilized lipases in organic solvents;
application to triglyceride interesterification (conference paper)

SO World Conf. Biotechnol. Fats + Oils Ind.; (1988) 123-30

AU Tanaka A; Kawamoto T; Kawase M; Nanko T; Sonomoto K

AN 1990-02358 BIOTECHDS

L25 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Effect of polyethylene glycol on the photochemical immobilization of an enzyme in photocrosslinkable poly(vinyl alcohol)

SO Makromolekulare Chemie (1987), 188(4), 763-8

CODEN: MACEAK; ISSN: 0025-116X

AU Ichimura, Kunihiro

AN 1987:191795 HCAPLUS

DN 106:191795

L25 ANSWER 32 OF 32 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Fixing **enzyme** by gel-inclusion process - using **crosslinking** agent e.g. **polyethylene glycol** diacrylate.

PI JP 60168386 A 19850831 (198541)* 4

JP 03069511 B 19911101 (199148)

=> d ab 14,23,28

L25 ANSWER 14 OF 32 MEDLINE on STN

DUPLICATE 1

AB The explosion in commercial and synthetic applications of enzymes has stimulated much of the interest in enhancing enzyme functionality and stability. Covalent chemical modification, the original method available for altering protein properties, has now re-emerged as a powerful complementary approach to site-directed mutagenesis and directed evolution for tailoring proteins and enzymes. Glutaraldehyde **crosslinking** of **enzyme** crystals and **polyethylene glycol** (PEG) modification of **enzyme** surface amino groups are practical methods to enhance biocatalyst stability. Whereas crosslinking of enzyme crystals generates easily recoverable insoluble biocatalysts, PEGylation increases solubility in organic solvents. Chemical modification has been exploited for the incorporation of cofactors onto protein templates and

for atom replacement in order to generate new functionality, such as the conversion of a hydrolase into a peroxidase. Despite the breadth of applicability of chemically modified enzymes, a difficulty that has previously impeded their implementation is the lack of chemo- or regio-specificity of chemical modifications, which can yield heterogeneous and irreproducible product mixtures. This challenge has recently been addressed by the introduction of a unique position for modification by a site-directed mutation that can subsequently be chemically modified to introduce an unnatural amino acid sidechain in a highly chemo- and regio-specific manner.

L25 ANSWER 23 OF 32 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
AB US 5324844 A UPAB: 19981104

A polyalkylene oxide having a mol. weight of less than 20,000, where at least one end gp. is an oxycarbonyl-oxy-N-dicarboximide gp. is new.

Pref. the polyalkylene oxide is of formula $R1-(O-R2)_a-(O-R3)_q-(O-R4)_c-O-CO-O-R5$ in which, $R1 = H, CH_3$, or a carbonyloxy N-dicarboxyimide gp. $R2-R4 = \text{alkyl}$; $R5 = \text{N-dicarboximide gp.}$; $a = 1-1,000$ and $b = 0-1,000$.

USE - To effect covalent attachment of PEG to a protein, the OH end gps. are converted to reactive functional gps.. The most common form of activated PEG is poly(ethyleneglycol) succinoyl-N-hydroxy-succinimide (SS-PEG). This and the present cpds. each to chemically modify polypeptides to reduce immunogenicity and antigenicity and increase lifetime in the bloodstream as compared to the parent polypeptides. These beneficial properties of the modified polypeptides make them very useful in a variety of therapeutic applications, such as enzyme therapy. The reactivity of SC-PEG and BSC-PEG is comparable to that of SS-PEG. Thus high degrees of modification are available in mild conditions (aqueous buffer, pH 5.8-11, pref. 7.0-9.5) within 30-60 mins. and at moderate temps. (4-40 deg.C.). Also the new agents are soluble in a variety of organic solvents, thus being useful in the coupling of low mol. weight partially protected peptides and other biologically useful ligands. An additional advantage of succinimide carbonate activated PEG is that those activated functional gps. that do not react with amino gps. of a protein undergo fast aqueous hydrolysis producing non-toxic N-hydroxysuccinimide, CO_2 and hydroxy-terminated PEG. This is of particular importance in the case of BSC-PEG which can serve a dual purpose, vis PEG-ylation and **crosslinking**. Biological activities of **proteins** modified with the new cpds. are preserved to a large extent.
Dwg.0/3

L25 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2005 ACS on STN

AB A biol. active substance (e.g. a cytotoxin, other drug, protein, enzyme, or nucleic acid) is delivered to cells (e.g. by receptor-mediated endocytosis) as a conjugate (e.g. an immunotoxin or prodrug) which can be cleaved within the cells under acidic conditions (e.g. at pH 5.4 in vesicles). The bifunctional crosslinking agent used in preparation of the conjugate is a ketal I [$A = \text{bridge unit, preferably } (CH_2)_n; n = 1-8; R = C1-9 \text{ alkyl (preferably Me), (substituted) Ph}$], an acetal II [A as defined above; $B = A, C_6H_4(CH_2)_n$], or an ortho ester III (A as above). These crosslinking agents can also be used to couple proteins reversibly to matrixes for synthetic and chromatog. purposes. Thus, I ($A = CH_2CH_2$) (IV) was prepared by ketal exchange between N-(2-hydroxyethyl)maleimide and 2,2-dimethoxypropane. A nicked diphtheria toxin monomer was thiolated with iminothiolane and crosslinked to human T-cell surface antigen CD5 with IV. The toxicity of this conjugate toward target Jurkat cells was 50-fold greater than that of a similar conjugate prepared with a noncleavable crosslinker, bis(maleimido)hexane..

=> s 112(5a)linker?(5a)(protein# or enzyme#)
FILE 'MEDLINE'
10174 LINKER?
1759365 PROTEIN#

730058 ENZYME#
 L26 1 L1 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'SCISEARCH'
 12657 LINKER?
 1400079 PROTEIN#
 459972 ENZYME#
 L27 6 L2 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'LIFESCI'
 4489 LINKER?
 522211 PROTEIN#
 197816 ENZYME#
 L28 0 L3 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'BIOTECHDS'
 4471 LINKER?
 136948 PROTEIN#
 122684 ENZYME#
 L29 2 L4 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'BIOSIS'
 10838 LINKER?
 1669165 PROTEIN#
 772072 ENZYME#
 L30 2 L5 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'EMBASE'
 9200 LINKER?
 1410253 PROTEIN#
 787204 ENZYME#
 L31 0 L6 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'HCAPLUS'
 19537 LINKER?
 2014283 PROTEIN#
 929021 ENZYME#
 L32 10 L7 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'NTIS'
 176 LINKER?
 18093 PROTEIN#
 12052 ENZYME#
 L33 0 L8 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'ESBIOBASE'
 6032 LINKER?
 655527 PROTEIN#
 226276 ENZYME#
 L34 2 L9 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'BIOTECHNO'
 5399 LINKER?
 653195 PROTEIN#
 353854 ENZYME#
 L35 0 L10 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 FILE 'WPIDS'
 7635 LINKER?
 142087 PROTEIN#
 78914 ENZYME#
 L36 4 L11 (5A) LINKER? (5A) (PROTEIN# OR ENZYME#)
 TOTAL FOR ALL FILES

L37 27 L12(5A) LINKER?(5A) (PROTEIN# OR ENZYME#)

=> dup rem 137

PROCESSING COMPLETED FOR L37

L38 22 DUP REM L37 (5 DUPLICATES REMOVED)

=> d tot

L38 ANSWER 1 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Construction of PEGylated gold colloid-assembled surface for high performance biosensor

SO KOBUNSHI RONBUNSHU, (FEB 2005) Vol. 62, No. 2, pp. 81-86.

Publisher: SOC POLYMER SCIENCE JAPAN, TSUKIJI DAISAN NAGAOKA BLDG, 2-4-2 TSUKIJI, CHUO-KU, TOKYO, 104, JAPAN.
ISSN: 0386-2186.

AU Ishii T (Reprint); Suzuki Y; Akiyama Y; Otsuka H; Kataoka K; Nagasaki Y

AN 2005:279872 SCISEARCH

L38 ANSWER 2 OF 22 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI Use of a Ble fusion protein as an expression and folding marker, as an affinity tag or as an expression and folding marker and an affinity tag, particularly, as markers for protein expression and/or folding;
recombinant bleomycin fusion protein production and DNA microarray for use in protein expression analysis

AU HART D; GODBER B; BLACKBURN J M; MCANDREWS M

AN 2004-15542 BIOTECHDS

PI WO 2004046730 3 Jun 2004

L38 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

TI PEG-physiologically active polypeptide homodimer complex having prolonged in vivo half-life and process for the preparation thereof

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

IN Kim, Young Min; Kim, Dae Jin; Bae, Sung Min; Lim, Chang Ki; Kim, Kyeong Bae; Kwon, Se Chang; Lee, Gwan Sun

AN 2004:857621 HCAPLUS

DN 141:337646

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI WO 2004087739 A1 20041014 WO 2004-KR781 20040403

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

L38 ANSWER 4 OF 22 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Novel bispecific molecule comprising a first recognition binding moiety that binds C3b-like receptor, cross-linked through a polyethylene glycol linker to second recognition binding moieties that bind molecules other than C3b-like receptors.

PI WO 2004024889 A2 20040325 (200431)* EN 95 C12N000-00

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH

PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC
 VN YU ZA ZM ZW
 AU 2003270686 A1 20040430 (200462) C12N000-00
 IN CASEY, L; LEE, L S; MOHAMED, N; PORTER, J P; SESAY, M; WANG, X

L38 ANSWER 5 OF 22 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI Producing activated ester of polyethylene glycol (PEG) useful for
 PEGylation of biologically active peptides and proteins, by activating PEG
 with N,N'-disuccinimidyl oxalate or 1,1'-bis(6-
 (trifluoromethyl)benzotriazolyl) oxalate.
 PI US 2004162388 A1 20040819 (200460)* 13 C07K014-47
 WO 2004074345 A2 20040902 (200460) EN C08G065-00
 RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE
 LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE
 DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
 KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ
 OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG
 US UZ VC VN YU ZA ZM ZW
 IN TJOENG, F S

L38 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Use of P97 as an enzyme delivery system for the delivery of therapeutic
 lysosomal enzymes
 SO PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 IN Starr, Christopher M.; Zankel, Todd
 AN 2003:551350 HCAPLUS
 DN 139:106432

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057179	A2	20030717	WO 2003-US894	20030110
WO 2003057179	A3	20031204		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1463512	A2	20041006	EP 2003-717870	20030110
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			

L38 ANSWER 7 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
 TI Surface modification of a novel porous titanium dioxide/glass composite
 SO MATERIALWISSENSCHAFT UND WERKSTOFFTECHNIK, (DEC 2003) Vol. 34, No. 12, pp. 1058-1063.
 Publisher: WILEY-V C H VERLAG GMBH, PO BOX 10 11 61, D-69451 WEINHEIM, GERMANY.
 ISSN: 0933-5137.
 AU Erli H J (Reprint); von Walter M; Ragoss C; Steffens G C M; Paar O; Maier H R
 AN 2004:127666 SCISEARCH

L38 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI PEG pro-linkers: Applications to biologically active molecules and proteins
 SO Polymeric Materials Science and Engineering (2003), 89, 627
 CODEN: PMSDGG; ISSN: 1550-6703

AU Greenwald, Richard B.; Grau, Uli; Choe, Yun H.; Zhao, Hong
AN 2003:666858 HCAPLUS
DN 140:169494

L38 ANSWER 9 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI Val-ala-pro-gly, an elastin-derived non-integrin ligand: Smooth muscle
cell adhesion and specificity
SO JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, (1 OCT 2003) Vol. 67A,
No. 1, pp. 255-259.
Publisher: WILEY-LISS, DIV JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK,
NY 10158-0012 USA.
ISSN: 0021-9304.
AU Gobin A S; West J L (Reprint)
AN 2003:889096 SCISEARCH

L38 ANSWER 10 OF 22 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
TI New immunoglobulin (Ig)G monoclonal antibody, useful for detection of a
target, and purification of a target e.g. peptides, proteins, enzymes,
cytokines, hematopoietins, growth factors, and hormones;
monoclonal antibody and humanized antibody production useful for
protein purification, DNA purification, RNA purification and diagnosis
AU ROBERTS M J; GREEN M E
AN 2003-09031 BIOTECHDS
PI WO 2002094853 28 Nov 2002

L38 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Use of human receptor activator of NF- κ B and osteoprotegerin
variants with improved ligand binding activity for treatment of
osteoporosis and bone disorders
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
IN Haaning, Jesper Mortensen; Halkier, Torben
AN 2002:637829 HCAPLUS
DN 137:181397

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064782	A2	20020822	WO 2002-DK90	20020208
	WO 2002064782	A3	20040108		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1399555	A2	20040324	EP 2002-711778	20020208
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2004132971	A1	20040708	US 2004-467243	20040112

L38 ANSWER 12 OF 22 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Evaluating solid phase for use in dual bead assay, involves binding solid
phase to probe optionally in presence of cross-linking agent and
determining amount of probe bound covalently to solid phase.
PI WO 2002068696 A2 20020906 (200315)* EN 137 C12Q001-68
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT

RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
 US 2002168663 A1 20021114 (200315) C12Q001-68
 US 2003077598 A1 20030424 (200330) C12Q001-68
 AU 2002238142 A1 20020912 (200433) C12Q001-68
 IN LAM, A H; PHAN, B C; VIRTANEN, J A; YEUNG, K

L38 ANSWER 13 OF 22 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI Macromolecular solid particles for transporting hydrophobic active agents
 e.g. drugs or nucleic acids, comprise molecular backbone, polycondensate
 side chains and side chain terminals having free reactive groups.
 PI WO 2002000191 A2 20020103 (200230)* GE 134 A61K009-00
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
 AU 2001081921 A 20020108 (200235) A61K009-00
 EP 1333806 A2 20030813 (200355) GE A61K009-00
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 US 2004062815 A1 20040401 (200424) A61K009-16
 IN FLAIG, R M; FRICKER, G

L38 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Substrate Specificity of the Integral Membrane Protease OmpT Determined by
 Spatially Addressed Peptide Libraries
 SO Biochemistry (2001), 40(6), 1694-1701
 CODEN: BICHAW; ISSN: 0006-2960
 AU Dekker, Niek; Cox, Ruud C.; Kramer, R. Arjen; Egmond, Maarten R.
 AN 2001:36316 HCAPLUS
 DN 134:233492

L38 ANSWER 15 OF 22 MEDLINE on STN DUPLICATE 1
 TI Drug delivery systems employing 1,6-elimination: releasable poly(ethylene
 glycol) conjugates of proteins.
 SO Bioconjugate chemistry, (2001 Mar-Apr) 12 (2) 163-9.
 Journal code: 9010319. ISSN: 1043-1802.
 AU Lee S; Greenwald R B; McGuire J; Yang K; Shi C
 AN 2001459730 MEDLINE

L38 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Laundry detergent and/or fabric care compositions comprising an enzyme
 modified with a cellulose-binding domain
 SO PCT Int. Appl., 96 pp.
 CODEN: PIXXD2
 IN Smets, Johan; Bettiol, Jean-Luc Philippe; Boyer, Stanton Lane; Busch,
 Alfred
 AN 1999:723153 HCAPLUS
 DN 131:324165

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9957250	A1	19991111	WO 1998-US8856	19980501
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9872754	A1	19991123	AU 1998-72754	19980501
CA 2330614	AA	19991111	CA 1999-2330614	19990430
WO 9957252	A1	19991111	WO 1999-US9453	19990430

W: BR, CA, CN, IN, JP, MX, US
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE

BR 9910151	A	20010109	BR 1999-10151	19990430
BR 9910158	A	20010109	BR 1999-10158	19990430
EP 1073724	A1	20010207	EP 1999-920204	19990430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2003522517	T2	20030729	JP 2000-547208	19990430
US 6465410	B1	20021015	US 2000-674471	20001101
US 6468955	B1	20021022	US 2000-674478	20001101

L38 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Activated PEG linkers and methods for making and purifying them
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2

IN Ibrahim, Prabha N.; Baile, Robert A.; Seely, James Ervin
 AN 1997:617995 HCAPLUS
 DN 127:268033

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9732607	A2	19970912	WO 1996-US19459	19961206
	WO 9732607	A3	19971113		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5747639	A	19980505	US 1996-611918	19960306
	CA 2248006	AA	19970912	CA 1996-2248006	19961206
	CA 2248006	C	20020528		
	AU 9714108	A1	19970922	AU 1997-14108	19961206
	AU 720399	B2	20000601		
	EP 906122	A2	19990407	EP 1996-944251	19961206
	EP 906122	B1	20030910		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000506851	T2	20000606	JP 1997-531747	19961206
	AT 249244	E	20030915	AT 1996-944251	19961206
	PT 906122	T	20031231	PT 1996-944251	19961206
	ES 2206616	T3	20040516	ES 1996-944251	19961206
	US 5935564	A	19990810	US 1997-936478	19970918

L38 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Issues encountered in the production of site-specific mono-PEGylated
 therapeutic proteins
 SO Polymer Preprints (American Chemical Society, Division of Polymer
 Chemistry) (1997), 38(1), 572-573
 CODEN: ACPPAY; ISSN: 0032-3934
 AU Seely, Jim; Richey, Carl; Grasel, Tim; Wilson, John
 AN 1997:224409 HCAPLUS
 DN 126:268347

L38 ANSWER 19 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI PEG thiazolidine-2-thione, a novel reagent for facile protein
 modification: Conjugation of bovine hemoglobin
 SO BIOCONJUGATE CHEMISTRY, (NOV-DEC 1996) Vol. 7, No. 6, pp. 638-641.
 Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.
 ISSN: 1043-1802.
 AU Greenwald R B (Reprint); Pendri A; Martinez A; Gilbert C; Bradley P
 AN 96:896460 SCISEARCH

L38 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Poly(ethylene glycol) Fluorescent Linkers
 SO Bioconjugate Chemistry (1995), 6(5), 596-8
 CODEN: BCCHE5; ISSN: 1043-1802
 AU Pendri, Annapurna; Martinez, Anthony; Xia, Jing; Shorr, Robert G. L.;
 Greenwald, Richard B.
 AN 1995:790826 HCAPLUS
 DN 123:229223

L38 ANSWER 21 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI MANUFACTURING OF RECOMBINANT TUMOR-NECROSIS-FACTOR BINDING-**PROTEIN**
 DUMBBELL USING A 20K **PEG** BIS-VINYLSULFONE **LINKER**
 SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (02 APR 1995) Vol.
 209, Part 1, pp. 68-BIOT.
 ISSN: 0065-7727.
 AU SEELY J (Reprint); RICHEY C; TODD B
 AN 95:623781 SCISEARCH

L38 ANSWER 22 OF 22 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI Manufacturing of recombinant tumor necrosis factor binding **protein**
 "dumbbell" using a 20K **PEG** bis-vinylsulfone **linker**.
 SO Abstracts of Papers American Chemical Society, (1995) Vol. 209, No. 1-2,
 pp. BIOT 68.
 Meeting Info.: 209th American Chemical Society National Meeting. Anaheim,
 California, USA. April 2-6, 1995.
 CODEN: ACSRAL. ISSN: 0065-7727.
 AU Seely J., C. Richey; Todd, B.
 AN 1995:239228 BIOSIS

=> d ab 17,19,20

L38 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 AB Activated PEG linkers, particularly those having reactive Michael
 acceptors, are prepared which can be used to modify biol. active mols. and
 improve overall production of such mols. An efficient process is provided for
 purifying the activated linkers by hydrophobic interaction chromatog.
 (HIC) to sep. the activated linkers based on their size and on their
 end-group functionality. Thus, PEG (20 kDa) reacted with divinyl sulfone
 to form PEG bis(vinyl sulfone) (I). I bound completely to ToyoPearl Bu
 650C resin in the presence of 1.75M NaCl or 0.25M Na2SO4; elution with a
 linear NaCl gradient separated 20-kDa I from high-mol.-weight I. The 20-kDa I
 was conjugated with a reduced tumor necrosis factor-binding protein
 mutein, and products bearing tumor necrosis factor at one or both ends of
 PEG were separated by HIC on ToyoPearl Bu 650C.

L38 ANSWER 19 OF 22 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 DUPLICATE 2
 AB A novel PEG linker that employs a thiazolidine-2-thione group has been
 synthesized. Kinetic studies done on this compound demonstrate a
 relatively long half-life compared to those of traditional succinimidyl
linkers. This new **PEG** derivative reacts with
proteins under mild conditions and was utilized to conjugate
 bovine hemoglobin (bHb) to provide a PEG amide-linked protein. The
 physical characteristics of this conjugate were compared with those of the
 known PEG carbamate-linked bHb.

L38 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
 AB The first examples of PEG linkers containing the highly fluorescent dansyl
 group were synthesized. Quantum yields of these PEG fluorescent linker
 were determined and utilized in calculating the PEG number of various protein

conjugates. The method was also shown to be applicable to lower mol. weight drugs as exemplified by taxol.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

150.82

151.03

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-2.19

-2.19

STN INTERNATIONAL LOGOFF AT 08:27:24 ON 20 APR 2005

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:39:16 ON 20 APR 2005

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIODASE, BIOTECHNO, WPIDS' ENTERED AT 08:39:26 ON 20 APR 2005
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s protein#(5a)conjugat?

FILE 'MEDLINE'

1759365 PROTEIN#

75574 CONJUGAT?

L1 5319 PROTEIN#(5A) CONJUGAT?

FILE 'SCISEARCH'

1400079 PROTEIN#

106571 CONJUGAT?

L2 4883 PROTEIN#(5A) CONJUGAT?

FILE 'LIFESCI'

522211 PROTEIN#

22489 CONJUGAT?

L3 2177 PROTEIN#(5A) CONJUGAT?

FILE 'BIOTECHDS'

136948 PROTEIN#

8285 CONJUGAT?

L4 973 PROTEIN#(5A) CONJUGAT?

FILE 'BIOSIS'

1669165 PROTEIN#

84018 CONJUGAT?

L5 6274 PROTEIN#(5A) CONJUGAT?

FILE 'EMBASE'

1410253 PROTEIN#

72830 CONJUGAT?

L6 4612 PROTEIN#(5A) CONJUGAT?

FILE 'HCAPLUS'

2014283 PROTEIN#

207032 CONJUGAT?

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L7      13409 PROTEIN# (5A) CONJUGAT?

FILE 'NTIS'
      18093 PROTEIN#
      4589 CONJUGAT?
L8      208 PROTEIN# (5A) CONJUGAT?

FILE 'ESBIOBASE'
      655527 PROTEIN#
      25047 CONJUGAT?
L9      2466 PROTEIN# (5A) CONJUGAT?

FILE 'BIOTECHNO'
      653195 PROTEIN#
      24320 CONJUGAT?
L10     2466 PROTEIN# (5A) CONJUGAT?

FILE 'WPIDS'
      142087 PROTEIN#
      44496 CONJUGAT?
L11     1956 PROTEIN# (5A) CONJUGAT?

TOTAL FOR ALL FILES
L12     44743 PROTEIN# (5A) CONJUGAT?

=> s (peg or polyethylene glycol) (10a) link?
FILE 'MEDLINE'
      8959 PEG
      33678 POLYETHYLENE
      22000 GLYCOL
      9086 POLYETHYLENE GLYCOL
            (POLYETHYLENE (W) GLYCOL)
      382837 LINK?
L13     309 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

FILE 'SCISEARCH'
      14973 PEG
      49789 POLYETHYLENE
      36174 GLYCOL
      11455 POLYETHYLENE GLYCOL
            (POLYETHYLENE (W) GLYCOL)
      411725 LINK?
L14     519 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

FILE 'LIFESCI'
      2228 PEG
      4480 "POLYETHYLENE"
      5906 "GLYCOL"
      3000 POLYETHYLENE GLYCOL
            ("POLYETHYLENE" (W) "GLYCOL")
      128013 LINK?
L15     85 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

FILE 'BIOTECHDS'
      6044 PEG
      3945 POLYETHYLENE
      4515 GLYCOL
      3036 POLYETHYLENE GLYCOL
            (POLYETHYLENE (W) GLYCOL)
      30772 LINK?
L16     127 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

FILE 'BIOSIS'
      11854 PEG

```

23925 POLYETHYLENE
 32559 GLYCOL
 14532 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 340098 LINK?
 L17 327 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'EMBASE'
 8915 PEG
 18670 "POLYETHYLENE"
 28246 "GLYCOL"
 8533 POLYETHYLENE GLYCOL
 ("POLYETHYLENE" (W) "GLYCOL")
 339891 LINK?
 L18 325 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'HCAPLUS'
 31703 PEG
 323028 POLYETHYLENE
 328789 GLYCOL
 90639 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 418245 LINK?
 L19 1011 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'NTIS'
 321 PEG
 5591 POLYETHYLENE
 1894 GLYCOL
 253 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 32483 LINK?
 L20 12 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'ESBIOBASE'
 3672 PEG
 4796 POLYETHYLENE
 6391 GLYCOL
 3005 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 144684 LINK?
 L21 174 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'BIOTECHNO'
 2816 PEG
 4665 POLYETHYLENE
 7260 GLYCOL
 3167 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 173624 LINK?
 L22 170 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 FILE 'WPIDS'
 15802 PEG
 197943 POLYETHYLENE
 109036 GLYCOL
 26705 POLYETHYLENE GLYCOL
 (POLYETHYLENE (W) GLYCOL)
 444068 LINK?
 L23 772 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

 TOTAL FOR ALL FILES
 L24 3831 (PEG OR POLYETHYLENE GLYCOL) (10A) LINK?

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=> s 112 and 124
FILE 'MEDLINE'
L25          12 L1 AND L13

FILE 'SCISEARCH'
L26          16 L2 AND L14

FILE 'LIFESCI'
L27          2 L3 AND L15

FILE 'BIOTECHDS'
L28          6 L4 AND L16

FILE 'BIOSIS'
L29          13 L5 AND L17

FILE 'EMBASE'
L30          9 L6 AND L18

FILE 'HCAPLUS'
L31          63 L7 AND L19

FILE 'NTIS'
L32          0 L8 AND L20

FILE 'ESBIOBASE'
L33          8 L9 AND L21

FILE 'BIOTECHNO'
L34          0 L10 AND L22

FILE 'WPIDS'
L35          19 L11 AND L23

TOTAL FOR ALL FILES
L36          148 L12 AND L24
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=> s 136 not 1999-2005/py
FILE 'MEDLINE'
      3325502 1999-2005/PY
L37          4 L25 NOT 1999-2005/PY

FILE 'SCISEARCH'
      6385167 1999-2005/PY
L38          8 L26 NOT 1999-2005/PY

FILE 'LIFESCI'
      647543 1999-2005/PY
L39          1 L27 NOT 1999-2005/PY

FILE 'BIOTECHDS'
      126993 1999-2005/PY
L40          0 L28 NOT 1999-2005/PY

FILE 'BIOSIS'
      3277108 1999-2005/PY
L41          4 L29 NOT 1999-2005/PY

FILE 'EMBASE'
      2914482 1999-2005/PY
L42          3 L30 NOT 1999-2005/PY

FILE 'HCAPLUS'
      6178020 1999-2005/PY
```

L43 15 L31 NOT 1999-2005/PY

FILE 'NTIS'

108997 1999-2005/PY

L44 0 L32 NOT 1999-2005/PY

FILE 'ESBIOBASE'

1817014 1999-2005/PY

L45 3 L33 NOT 1999-2005/PY

FILE 'BIOTECHNO'

611346 1999-2005/PY

L46 0 L34 NOT 1999-2005/PY

FILE 'WPIDS'

5325720 1999-2005/PY

L47 3 L35 NOT 1999-2005/PY

TOTAL FOR ALL FILES

L48 41 L36 NOT 1999-2005/PY

=> dup rem l48

PROCESSING COMPLETED FOR L48

L49 20 DUP REM L48 (21 DUPLICATES REMOVED)

=> d tot

L49 ANSWER 1 OF 20 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Detecting/treating target cells, tissues or pathogens - by a pre-targetting method which uses improved chelate conjugates, which can improve the amount of radionuclide delivered to the target.

PI WO 9804293 A1 19980205 (199813)* EN 38 A61K051-00

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

AU 9740474 A 19980220 (199828) A61K051-00

IN GRIFFITHS, G L; HANSEN, H J; KARACAY, H

L49 ANSWER 2 OF 20 MEDLINE on STN DUPLICATE 1

TI Short communication: renal tubular vacuolation in animals treated with polyethylene-glycol-**conjugated proteins**.

SO Toxicological sciences : an official journal of the Society of Toxicology, (1998 Apr) 42 (2) 152-7.

Journal code: 9805461. ISSN: 1096-6080.

AU Bendele A; Seely J; Richey C; Sennello G; Shopp G

AN 1998240182 MEDLINE

L49 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Issues encountered in the production of site-specific mono-PEGylated therapeutic proteins

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1997), 38(1), 572-573

CODEN: ACPPAY; ISSN: 0032-3934

AU Seely, Jim; Richey, Carl; Grasel, Tim; Wilson, John

AN 1997:224409 HCAPLUS

DN 126:268347

L49 ANSWER 4 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 2

TI Hydrazide derivatives of poly(ethylene glycol) and their bioconjugates

SO ACS SYMPOSIUM SERIES, (FEB 1997) Vol. 680, pp. 318-341.

Publisher: AMER CHEMICAL SOC, 1155 SIXTEENTH ST NW, WASHINGTON, DC 20036.
ISSN: 0097-6156.

AU Zalipsky S (Reprint); MenonRudolph S
AN 1998:12679 SCISEARCH

L49 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Novel degradable PEG esters for drug delivery: Synthesis and
characterization.
SO Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17
(1997), POLY-024 Publisher: American Chemical Society, Washington, D. C.
CODEN: 64AOAA
AU Zhao, Xuan; Harris, J. Milton
AN 1997:163952 HCAPLUS

L49 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
TI Pegylated modified proteins
SO PCT Int. Appl., 71 pp.
CODEN: PIXXD2
IN Bona, Constantin; Brumeanu, Teodor-Doru
AN 1997:97355 HCAPLUS
DN 126:103109

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640731	A1	19961219	WO 1996-US8995	19960606
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9662550	A1	19961230	AU 1996-62550	19960606

L49 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Low diol polyalkylene oxide for modifying proteins to increase their
half-life and reduce immunogenicity
SO U.S., 36 pp., Cont.-in-part of U.S. Ser. No. 936,416, abandoned.
CODEN: USXXAM
IN Snow, Robert A.; Ladd, David L.; Hoyer, Denton W.
AN 1996:452743 HCAPLUS
DN 125:136431

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5532150	A	19960702	US 1994-245999	19940519
CA 2101361	AA	19940228	CA 1993-2101361	19930727
JP 06172201	A2	19940621	JP 1993-210302	19930825
AU 9344885	A1	19940303	AU 1993-44885	19930826
AU 675798	B2	19970220		
HU 66755	A2	19941228	HU 1993-2440	19930827
US 5661020	A	19970826	US 1996-632300	19960415

L49 ANSWER 8 OF 20 MEDLINE on STN DUPLICATE 4
TI PEG thiazolidine-2-thione, a novel reagent for facile **protein**
modification: **conjugation** of bovine hemoglobin.
SO Bioconjugate chemistry, (1996 Nov-Dec) 7 (6) 638-41.
Journal code: 9010319. ISSN: 1043-1802.
AU Greenwald R B; Pendri A; Martinez A; Gilbert C; Bradley P
AN 97107756 MEDLINE

L49 ANSWER 9 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI PROLONGED CIRCULATION OF RECOMBINANT HUMAN GRANULOCYTE-COLONY-STIMULATING
FACTOR BY COVALENT **LINKAGE** TO ALBUMIN THROUGH A
HETEROBIFUNCTIONAL **POLYETHYLENE-GLYCOL**
SO PHARMACEUTICAL RESEARCH, (DEC 1995) Vol. 12, No. 12, pp. 1883-1888.
ISSN: 0724-8741.
AU PAIGE A G (Reprint); WHITCOMB K L; LIU J; KINSTLER O
AN 96:69623 SCISEARCH

L49 ANSWER 10 OF 20 MEDLINE on STN DUPLICATE 5
 TI Poly(ethylene glycol) fluorescent linkers.
 SO Bioconjugate chemistry, (1995 Sep-Oct) 6 (5) 596-8.
 Journal code: 9010319. ISSN: 1043-1802.
 AU Pendri A; Martinez A; Xia J; Shorr R G; Greenwald R B
 AN 96113592 MEDLINE

L49 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI PEG-protein constructs for clinical use
 SO Perspectives on Protein Engineering & Complementary Technologies,
 Collected Papers, International Symposium, 3rd, Oxford, Sept. 13-17, 1994
 (1995), Meeting Date 1994, 223-226. Editor(s): Geisow, Michael J.; Epton,
 Roger. Publisher: Mayflower Worldwide, Kingswinford, UK.
 CODEN: 62ZQAP
 AU Fisher, D.; Delgado, C.; Tejedor, M. C.; Malik, F.; Francis, G. E.
 AN 1996:398583 HCAPLUS
 DN 125:95896

L49 ANSWER 12 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI POLY(ETHYLENE GLYCOL)-MODIFIED PHOSPHOLIPIDS PREVENT AGGREGATION DURING
 COVALENT **CONJUGATION** OF **PROTEINS** TO LIPOSOMES
 SO BIOCONJUGATE CHEMISTRY, (MAR/APR 1995) Vol. 6, No. 2, pp. 187-194.
 ISSN: 1043-1802.
 AU HARASYM T O (Reprint); TARDI P; LONGMAN S A; ANSELL S M; BALLY M B; CULLIS
 P R; CHOI L S L
 AN 95:246092 SCISEARCH

L49 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI **PEG** hydrazone and **PEG** oxime **linkage** forming
 reagents and protein derivatives.
 SO Eur. Pat. Appl., 47 pp.
 CODEN: EPXXDW
 IN Wright, David E.
 AN 1995:319762 HCAPLUS
 DN 122:89553

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 605963	A2	19940713	EP 1993-309825	19931207
	EP 605963	A3	19951108		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CA 2110543	AA	19940610	CA 1993-2110543	19931202
	FI 9305485	A	19940610	FI 1993-5485	19931208
	NO 9304477	A	19940610	NO 1993-4477	19931208
	ZA 9309214	A	19950608	ZA 1993-9214	19931208
	AU 9352383	A1	19940623	AU 1993-52383	19931209
	JP 07196925	A2	19950801	JP 1993-340709	19931209

L49 ANSWER 14 OF 20 MEDLINE on STN DUPLICATE 6
 TI Quantitative analysis of polyethylene glycol (PEG) in PEG-modified
 proteins/cytokines by aqueous two-phase systems.
 SO Journal of biochemical and biophysical methods, (1994 Dec) 29 (3-4)
 237-50.
 Journal code: 7907378. ISSN: 0165-022X.
 AU Delgado C; Malik F; Selisko B; Fisher D; Francis G E
 AN 95213525 MEDLINE

L49 ANSWER 15 OF 20 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI New poly alkylene glycol aldehyde derivs. - used to prepare antibody imine
 or amine conjugates.
 PI US 5252714 A 19931012 (199342)* 5 C07K003-08
 IN HARRIS, J M; SEDAGHAT-HERATI, M R

L49 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

TI A strategy for characterization of polyethylene glycol-derivatized proteins. A mass spectrometric analysis of the attachment sites in polyethylene glycol-derivatized superoxide dismutase

SO Drug Metabolism and Disposition (1993), 21(5), 911-17
CODEN: DMDSAI; ISSN: 0090-9556

AU Vestling, Martha M.; Murphy, Constance M.; Keller, Deborah A.; Fenselau, Catherine; Dedinas, Jonas; Ladd, David L.; Olsen, Mark A.

AN 1994:86193 HCAPLUS

DN 120:86193

L49 ANSWER 17 OF 20 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI Modification of **protein conjugated** drugs by polyethylene glycol.

SO Current Opinion in Therapeutic Patents, (1993) Vol. 3, No. 1, pp. 93-94.
ISSN: 0962-2594 CODEN: COTPES

AN 93079714 EMBASE

L49 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Hydrazine-containing conjugates of polypeptides and glycopolypeptides with polymers

SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2

IN Zalipsky, Samuel; Lee, Chyi; Menon-Rudolph, Sunitha

AN 1993:76627 HCAPLUS

DN 118:76627

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9216555	A1	19921001	WO 1992-US2047	19920312
W: AU, CA, HU, JP, KR, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9216769	A1	19921021	AU 1992-16769	19920312
EP 576589	A1	19940105	EP 1992-909326	19920312
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06506217	T2	19940714	JP 1992-508914	19920312
CA 2101918	AA	19920919	CA 1992-2101918	19920316

L49 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Conjugates for targeted delivery of bone growth factors

SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW

IN Bentz, Hanne; Rosen, David

AN 1993:66851 HCAPLUS

DN 118:66851

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 512844	A1	19921111	EP 1992-304142	19920508
EP 512844	B1	19970806		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
CA 2102808	AA	19921111	CA 1992-2102808	19920507
WO 9220371	A1	19921126	WO 1992-US3840	19920507
W: AU, CA, JP				
AU 9219947	A1	19921230	AU 1992-19947	19920507
AU 662155	B2	19950824		
AT 156365	E	19970815	AT 1992-304142	19920508
ES 2104827	T3	19971016	ES 1992-304142	19920508

L49 ANSWER 20 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 7

TI SUCCINIMIDYL CARBONATES OF POLYETHYLENE-GLYCOL - USEFUL REACTIVE POLYMERS FOR PREPARATION OF **PROTEIN CONJUGATES**

SO ACS SYMPOSIUM SERIES, (1991) Vol. 469, pp. 91-100.

AU ZALIPSKY S (Reprint); SELTZER R; NHO K

AN 91:505276 SCISEARCH

=> d ab tot

L49 ANSWER 1 OF 20 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
AB WO 9804293 A UPAB: 19980330

The following are claimed: (A) a method for detecting or treating target cells, tissues or pathogens ('the target material') in a patient, comprising: (a) pre-targeting the material with avidin, using a targeting protein that (i) specifically binds a marker substance on the target material, and to which (ii) avidin is bound either directly (as an avidin-targeting **protein conjugate**) or indirectly (via non-covalent bonding of avidin to a biotin-targeting **protein conjugate**); (b) parenterally injecting a detection or therapeutic composition (comprising a biotin-chelator conjugate and a chelatable metal ion detection/therapeutic agent), and allowing the composition to accrete at the target material, and (c) using the detection/therapeutic agent to detect or treat the target material. The chelate conjugate is (i) purified by chromatography after chelation of the metal ion, or (ii) also comprises a blood transit-modifying linker or addend which is covalently bound to the chelate conjugate, and (B) a sterile injectable composition, for human use, comprising: (a) a biotin-chelator conjugate and a chelatable metal ion detection/therapeutic agent; or (b) a biotin-chelator conjugate (to which a blood transit-modifying linker or addend is covalently bound) and a chelatable metal ion detection/therapeutic agent.

The chromatography is anion exchange chromatography. The blood transit-modifying **linker** or addend is dextran, polypeptide or **polyethylene glycol**. It has a fractional clearance by the kidney of < 1. It has an effective molecular radius of 15-40 Angstrom. The metal ion detection or therapeutic agent is an electron- or a neutron-capturing agent. The metal of the agent is antimony-119, actinium-225, rhenium-186, -188 or 189, silver-111, platinum-197, palladium-103 or 109, copper-67, etc. The chelating agent is DOTA (1,4,7,10-tetraazacyclododecane N,N',N'',N'''-tetraacetic acid). The multiple chelate conjugate is a metallothionein or comprises a synthetic polymer.

USE - The process may be used for detection and/or treatment of pathological conditions, such as tumours.

ADVANTAGE - Compared to prior art processes, the above processes allow delivery of higher amounts, higher specific activities and higher target:nontarget ratios of detection/therapeutic agents to target sites. They allow greater control of the residence time of administered detection and therapeutic agents in the body.

Dwg.0/0

L49 ANSWER 2 OF 20 MEDLINE on STN DUPLICATE 1

AB During toxicologic evaluation of a dimeric **PEG-linked** protein, tumor necrosis factor binding protein (TNF-bp), vacuolation of renal cortical tubular epithelium was seen in male and female Sprague-Dawley rats (200-300 g) given i.v. doses of 40, 20, or 10 mg/kg every other day for 3 months. Tubular lesions in rats treated with 20 or 40 mg/kg for 3 months were only partially reversible after a 2-month recovery period. Despite the presence of marked vacuolation, there were no changes in BUN, creatinine, urinalysis parameters, urinary NAG, urinary B2-microglobulin, or fractional sodium excretion. Single i.v. doses > or = 20 mg/kg TNF-bp caused similar but milder changes. However, equivalent doses of **PEG** alone or the non-**PEG-linked** TNF-bp did not cause light microscopic evidence of vacuolation. Treatment of rats with another **PEG-linked** protein of similar molecular weight resulted in similar changes. Immunostaining for TNF-bp revealed positivity in the apical cytoplasm of renal tubular epithelium within 1 h of i.v. dosing. Immunostaining of kidneys from chronically dosed rats indicated that protein was present in some vacuoles as long as dosing continued; however, kidneys from animals on a reversibility study

had vacuoles but no immunostaining for TNF-bp. These results, along with a study that showed more severe lesions with **PEG-linked** proteins of lower molecular weight and minimal if any lesions with **PEG-linked** proteins > 70 kDa, suggest that TNF-bp is filtered through the glomerulus and that the protein with attached PEG is reabsorbed by the proximal tubules. Vacuolation may be a result of fluid distension of lysosomes due to the hygroscopic nature of PEG. These studies demonstrated that **PEG-linked** proteins have the capacity to induce renal tubular vacuolation at high doses. However, the change was not associated with alteration of clinical pathology or functional markers.

L49 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB A review with 8 refs. of the influence of pegylation conditions and **PEG linker** quality on attachment of **PEG** to protein cysteine residues, and of the influence of NaBH₃CN quality and PEG aldehyde quality on PEG modification of protein amino groups.

L49 ANSWER 4 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 2

AB Hydrazide derivatives of poly(ethylene glycol) (PEG-Hz) have a number of attributes making them useful for preparation of conjugates, particularly of polypeptides and glycoproteins. They form conjugates in mildly acidic aqueous solutions via two modes of reactivity. The first one involves hydrazone formation with reactive carbonyls generated on the substrate molecule by several different methods. These include oxidation of oligosaccharide residues of glycoproteins, glyoxylate / Cu²⁺ -mediated transamination of the N-terminal residue of polypeptides, periodate oxidation of N-terminal Ser or Thr residues. The second mode involves coupling with carbodiimide-activated carboxyl groups forming diacylhydrazide **linkages** with **PEG**. Synthesis of **PEG-Hz** is straightforward by hydrazinolysis of esters of either carboxymethylated **PEG** or urethane-**linked** amino acid. Having an unusual amino acid, e.g. beta-Ala, as part of the linker offers a convenient way for composition determination of **protein conjugates**, particularly those containing multiple chains of mPEG-O(C=O)-beta-Ala-Hz, by amino acid analysis. Our work involving PEG-Hz conjugation, including examples of preparation of N-terminally modified polypeptides, oligosaccharide-linked glycoproteins, polypeptides modified on their carboxyl groups, and immunoconjugates of enzymes and liposomes is discussed in this review.

L49 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB In this presentation we describe two applications of new hydrolytically-degradable PEG derivs. The first involves preparation and characterization of degradable PEG hydrogels. These PEGs contain ester **linkages** and can be prepared by reaction of **PEG** carboxylic acids with PEG. The degradation rates of these gels can be fine-tuned by variation in mol. structure of the esters and in the degree of branching of the PEGs. The second application involves preparation of soluble **PEG-protein conjugates** in which the **PEG** is attached to the protein via a hydrolytically degradable ester **linkage**. The ester-containing PEGs are prepared by condensation of PEG carboxylic acids with small hydroxy-acids. Conversion to succinimidyl active esters permits coupling to amino groups of proteins. Varying the types of PEG acid and hydroxy-acid gives control over the rates of hydrolysis. Applications to drug delivery will be presented.

L49 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

AB The present invention relates to pegylated proteins, including modified Ig mols. mildly derivatized with polyethylene glycol. The pegylated Igs also contains a T cell epitope or a B cell epitope. Such "pegylated" Igs may be used to produce an enhanced immune response in the absence of adjuvant. In particular embodiments, the present invention relates to

proteins conjugated to polyethylene glycol via carbohydrate residues.

L49 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB Physiol. active proteins, e.g., superoxide dismutase, are optimized for pharmaceutical use by covalently **linking** with a low diol polyalkylene oxide, e.g., **polyethylene glycol**, to increase their half-life and reduce immunogenicity. Also disclosed is a method of treatment of disease processes associated with the adverse effects on tissue of superoxide anions, such as ischemic events, reperfusion injury, trauma and inflammation. Preparation of methoxypolyethylene glycol N-succinimidyl succinate and its use for modifying superoxide dismutase, catalase, etc., were shown.

L49 ANSWER 8 OF 20 MEDLINE on STN

DUPLICATE 4

AB A novel **PEG linker** that employs a thiazolidine-2-thione group has been synthesized. Kinetic studies done on this compound demonstrate a relatively long half-life compared to those of traditional succinimidyl linkers. This new PEG derivative reacts with proteins under mild conditions and was utilized to conjugate bovine hemoglobin (bHb) to provide a **PEG amide-linked** protein. The physical characteristics of this conjugate were compared with those of the known **PEG carbamate-linked** bHb.

L49 ANSWER 9 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

AB Purpose. Recombinant human granulocyte-colony stimulating factor (rhG-CSF) was covalently conjugated to both rat and human serum albumin (RSA and HSA respectively) to increase the circulating half life ($t(1/2)$) of rhG-CSF.

Methods. Conjugates of RSA (MW 67,000) and HSA (MW 66,000) were prepared by **linking** the two proteins through a heterobifunctional maleimido-carboxyl **polyethylene glycol (PEG)** and were tested in the rat. The conjugates were injected intravenously (IV) at the equivalent dose of 50 μ g/kg of rhG-CSF, and white blood cell (WBC) counts and plasma concentrations of drug were determined. A comparison of pharmacokinetic parameters was made between rhG-CSF, the conjugates RSA-PEG-rhG-CSF and HSA-PEG-rhG-CSF, and a non-covalent mixture of rhG-CSF and HSA.

Results. The albumin-rhG-CSF conjugates are eliminated more slowly from the circulation. The clearance values are reduced from 0.839 \pm 0.121 ml/min/kg for rhG-CSF to 0.172 \pm 0.013 ml/min/kg for RSA-PEG-rhG-CSF and 0.141 \pm 0.005 ml/min/kg for HSA-PEG-rhG-CSF. WBC counts increased in both absolute number and duration as compared to rhG-CSF alone. The albumin rhG-CSF conjugates had enhanced serum stability relative to free rhG-CSF. The rate of degradation of the albumin conjugates incubated in rat Serum at 37 degrees C decreased five fold.

Conclusions. The results from the study show that specific conjugation of rhG-CSF to albumin decreases plasma clearance in vivo, causes increased WBC response, and increases serum stability as compared to free rhG-CSF.

L49 ANSWER 10 OF 20 MEDLINE on STN

DUPLICATE 5

AB The first examples of **PEG linkers** containing the highly fluorescent dansyl group have been synthesized. Quantum yields of these **PEG fluorescent linkers** (PFL) were determined and utilized in calculating the **PEG** number of various **protein conjugates**. The method was also shown to be applicable to lower molecular weight drugs as exemplified by taxol.

L49 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB Covalent attachment of polyethylene glycol (PEG) to proteins increases plasma half life, increases resistance to proteolysis and reduces antigenicity/ immunogenicity. Such benefits have prompted the development of PEG-proteins as therapeutic agents. A novel method of activating PEG

with tresyl chloride, which attaches **PEG** to amino groups by a direct secondary amine **linkage**, without any coupling moiety (portion of the activated **PEG**) remaining in the PEG-protein construct have been investigated. Using erythropoietin and granulocyte-macrophage colony stimulating factor as the target proteins, this method has been compared with four other common methods of PEG activation: cyanuric acid, phenylchloroformate, carbonyldiimidazole and succinimidyl succinate. Either conservation of biol. activity or lack of toxic contaminants (or both) was inferior for the other methods.

L49 ANSWER 12 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

AB Liposome aggregation is a major problem associated with the covalent attachment of proteins to liposomes. This report describes a procedure for coupling proteins to liposomes that results in little or no change in liposome size. This is achieved by incorporating appropriate levels of poly(ethylene glycol)-modified lipids into the liposomes. The studies employed thiolated avidin-D coupled to liposomes containing the thio-reactive lipid N-(4-(p-maleimidophenyl)butyryl)dipalmitoyl phosphatidylethanolamine (1 mol % of total lipid) and various amounts of MePEG-S-POPE (monomethoxypoly(ethylene glycol) **linked** to phosphatidylethanolamine via a succinate **linkage**). The influence of **PEG** chain length and density was also assessed. The presence of PEG on the surface of liposomes is shown to provide an effective method of inhibiting aggregation and the corresponding increase in liposome size during the covalent coupling of avidin-D. A balance between the size of the PEG used and the amount of PEG-lipid incorporated into the liposome had to be achieved in order to maintain efficient coupling. Optimal coupling efficiencies in combination with minimal aggregation effects were achieved using 2 mol % MePEG(2000)-S-POPE (PEG of 2000 MW) or 0.8 mol % MePEG(5000)-S-POPE (PEG of 5000 MW). At these levels, the presence of PEG did not affect the biotin binding activity of the covalently attached avidin. The ability of the resulting liposomes to specifically target to biotinylated cells is demonstrated.

L49 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB Compds. for modifying polypeptides with PEG or other water-soluble organic polymers are described. The water-soluble polymer reagents include hydrazine, hydrazine carboxylate, semicarbazole, thiosemicarbazide, carbonic acid dihydrazide, carbazide, thiocarbazide, and arylhydrazide derivs. as well as oxylamine derivs. of water-soluble organic polymers, such as polyethylene glycol, polypropylene glycol, polyoxyethylated polyol, heparin, heparin fragments, dextran polysaccharides, polyamino acids, and polyvinyl alc. Kits for modifying polypeptides with the above water-soluble polymer reagents are also provided. Thus, erythropoietin was modified by oxidation and treatment with monomethoxypolyoxyethylene semicarbazide and the product was separated by chromatog. The antigenicity and the effect on hematocrit levels of the above derivs. were demonstrated.

L49 ANSWER 14 OF 20 MEDLINE on STN DUPLICATE 6

AB Covalent attachment of poly(ethylene glycol) (PEG) to **proteins** produces **conjugates** with altered/improved physicochemical and biological properties which depend upon the number of **PEG** chains **linked**. Quantification of the attached PEG is however not a trivial issue. The partition coefficient, K, of the PEG-**protein conjugate** in PEG/dextran two-phase systems provides a quantitative measure for the degree of modification. A linear relationship between log K and the number of PEG chains was observed in fractionated PEG-modified-granulocyte-macrophage colony stimulating factor conjugates having 1 to 3 substitutions. Furthermore, in mixtures of PEG-bovine-serum-albumin conjugates with increasing degrees of modification, a linear relationship was found between log K and n, the average substitution. The increment in log K per PEG chain added is protein specific and this suggests that the interactions between the PEG-

protein conjugate and the polymers in the phase system are more complex than just a simple affinity of the PEG for the PEG-rich top phase. Increasing the polymer concentration in the phase system produces larger increments in log K per PEG molecule attached and the proportionality between log K and number of PEG molecules is only compromised for conjugates with high degree of substitution when partitioned in biphasic systems of high concentration of polymers.

L49 ANSWER 15 OF 20 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

AB US 5252714 A UPAB: 19931202

Polyalkylene glycol derivs. of formula $R_1(CH_2)_2X(CH_2)_mX(CH_2)_2(OC(R_2)HCH_2)_nX(CH_2)_mX(CH_2)_2R_3$ (I) are new. R_1 and $R_3=CHO$, $CH=NR_4$ or CH_2NHR_4 ; R_4 =an antibody; $X=O$ or S ; $R_2=H$ or 1-6C alkyl; n =an integer less than 10,000; $m=2-6$.

Also claimed is a process for amine modification comprising preparing an 'amine comprising substance' (II) in a solution and adding a cpd. (I; $R_1=R_3=CHO$).

USE/ADVANTAGE - Cpd. (I; $R_1=R_3=CHO$) may be used (a) to prepare polyalkylene glycol **conjugates** of **proteins**, especially antibodies, i.e. cpds. (I) where R_1 and/or $R_3=CH=NR_4$ or CH_2NHR_4 , and (b) to **link** such proteins to aminated surfaces. In contrast to known reactive **polyethylene glycol** (PEG) derivs., PEG derivs. of type (I; $R_1=R_3=CHO$) are not destroyed by water, are reactive in aqueous media, and react selectively with amino gps. Dwg. 0/0

L49 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB Base treatment of **polyethylene glycol**-derivatized

superoxide dismutase in which the **polyethylene glycol** is **linked** to the protein via a succinyl bridge, removes the **polyethylene glycol** leaving a succinyl marker.

Exhaustive succinylation with d4-succinic anhydride completes the derivatization in order to minimize fractionation in proteolysis, chromatog., and desorption in the mass spectrometer. Production of peptides from the derivatized protein for high-resolution and high-resolution tandem MS allows identification of the site that had been derivatized by polyethylene glycol and the determination of the amount of polyethylene glycol originally at each site. The mass spectrometric strategy outlined herein can be applied to other proteins derivatized for therapeutic administration.

L49 ANSWER 17 OF 20 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AB Novelty: Novel **polyethylene glycol** (PEG)

conjugates of **proteins** produced by using unique **linkers** which connect the various free amino acid groups in a protein to PEG which circumvent the problems associated with the formation of other PEG **protein conjugates**. The protein interleukin-1 receptor antagonist (IL-1ra) and interleukin-1 (IL-1) conjugated to PEG are also provided. Biology: The PEG **protein conjugates** are physiologically active, substantially non-immunogenic and water-soluble having at least part of the biological activity of the **protein** which forms the **conjugate**. Chemistry: The **conjugate** of a **protein** is produced by condensing activated PEG (PEG wherein one hydroxy group has been replaced by an activated **linker**) with one or more of the free amino groups of the protein.

L49 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB Biol. active polypeptides and glycopolypeptides are conjugated at a reactive carbonyl or carboxylic acid group of the polypeptide with water-soluble polymers by a linkage containing a hydrazide or hydrazone functional group. The linkage preferably also includes an amino acid or peptide sequence. The conjugates represent a novel form of drug delivery

(no data). Methoxy-PEG (mPEG) was treated with phosgene and then reacted with β -alanine Et ester.HCl. The mPEG- β -alanine Et ester product was treated with hydrazine under reflux for 6 h and the mPEG-hydrazide derivative containing β -Ala was **conjugated** to various **proteins**, e.g. activated chymotrypsin, activated bovine serum albumin, oxidized ovalbumin, oxidized human IgG, and activated G-CSF. The proteins were activated at the carboxyl groups with EDC (carbodiimide) or N-hydroxy-5-norbornene-2,3-dicarboximide. Carbohydrate groups were oxidized with NaIO₄ for activation. Extensive crosslinking of the proteins was prevented.

L49 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2005 ACS on STN

AB A bone growth factor, such as the transforming growth factor- β (TGF- β), activin and bone morphogenetic **protein**, are **conjugated** a targeting mol. with bone affinity (tetracycline, calcein, bisphosphonate, estrogen, etc.). Conjugation is carried out using a **cross-linker**, preferably a synthetic hydrophilic polymer, such as **PEG**. A solution of 2 μ mol tetracycline in 1 μ mol bisepoxy-PEG was heated at 90°, followed by the addition of a solution of 100 μ g TGF- β 2 in 0.02 M Na borate containing 0.02% SDS and 50% acetonitrile and pH adjustment to 9, to give the TGF- β -PEG-tetracycline conjugate.

L49 ANSWER 20 OF 20 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 7

AB A new type of functionalized derivatives of polyethylene glycol (PEG), namely succinimidyl carbonates (SC), were prepared and evaluated as reagents for preparation of **PEG-protein conjugates**. SC-activated PEGs showed high reactivity towards amino groups of lysine residues producing under mild conditions (pH 7.0 - 10.0, 25-degrees-C, 30 min) extensively modified proteins, in which **PEG** chains are **linked** to a polypeptide core through stable urethane (carbamate) linkages. A variety of proteins: chymotrypsin, trypsin, adenosine deaminase, asparaginase, arginase, hemoglobin were subjected to modifications with SC-PEG yielding conjugates with excellent preservation of biological/enzymatic activities.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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STN INTERNATIONAL LOGOFF AT 08:51:56 ON 20 APR 2005

* * * * * STN Columbus * * * * *

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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11 FILES IN THE FILE LIST

=> s peg or polyethylene glycol

FILE 'MEDLINE'

8959 PEG
33678 POLYETHYLENE
22000 GLYCOL
9086 POLYETHYLENE GLYCOL
(POLYETHYLENE(W)GLYCOL)

L1 14753 PEG OR POLYETHYLENE GLYCOL

FILE 'SCISEARCH'

14973 PEG
49789 POLYETHYLENE
36174 GLYCOL
11455 POLYETHYLENE GLYCOL
(POLYETHYLENE(W)GLYCOL)

L2 21749 PEG OR POLYETHYLENE GLYCOL

FILE 'LIFESCI'

2228 PEG
4480 "POLYETHYLENE"
5906 "GLYCOL"
3000 POLYETHYLENE GLYCOL
("POLYETHYLENE" (W) "GLYCOL")

L3 4068 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOTECHDS'

6044 PEG
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4515 GLYCOL
3036 POLYETHYLENE GLYCOL
(POLYETHYLENE(W)GLYCOL)

L4 7723 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOSIS'

11854 PEG
23925 POLYETHYLENE
32559 GLYCOL
14532 POLYETHYLENE GLYCOL
(POLYETHYLENE(W)GLYCOL)

L5 20621 PEG OR POLYETHYLENE GLYCOL

FILE 'EMBASE'

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18670 "POLYETHYLENE"
28246 "GLYCOL"
8533 POLYETHYLENE GLYCOL
("POLYETHYLENE" (W) "GLYCOL")

L6 14197 PEG OR POLYETHYLENE GLYCOL

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31703 PEG
323028 POLYETHYLENE
328789 GLYCOL
90639 POLYETHYLENE GLYCOL
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L7 108449 PEG OR POLYETHYLENE GLYCOL

FILE 'NTIS'

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1894 GLYCOL
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L8 499 PEG OR POLYETHYLENE GLYCOL

FILE 'ESBIOBASE'

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4796 POLYETHYLENE
6391 GLYCOL
3005 POLYETHYLENE GLYCOL
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L9 5248 PEG OR POLYETHYLENE GLYCOL

FILE 'BIOTECHNO'

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4665 POLYETHYLENE
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L10 4868 PEG OR POLYETHYLENE GLYCOL

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L11 39735 PEG OR POLYETHYLENE GLYCOL

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FILE 'BIOTECHDS'
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FILE 'BIOSIS'
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FILE 'EMBASE'
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FILE 'HCAPLUS'
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FILE 'NTIS'
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FILE 'ESBIOBASE'
L33 11 L21(5A)L9

FILE 'BIOTECHNO'
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10817 CROSSLINK?

75574 CONJUGAT?
 L37 18 L25 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
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 411725 LINK?
 28041 CROSSLINK?
 106571 CONJUGAT?
 L38 24 L26 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
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 L40 8 L28 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
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 14929 CROSSLINK?
 84018 CONJUGAT?
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 11291 CROSSLINK?
 72830 CONJUGAT?
 L42 18 L30 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 FILE 'HCAPLUS'
 418245 LINK?
 249495 CROSSLINK?
 207032 CONJUGAT?
 L43 55 L31 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 FILE 'NTIS'
 32483 LINK?
 3105 CROSSLINK?
 4589 CONJUGAT?
 L44 1 L32 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 FILE 'ESBIOBASE'
 144684 LINK?
 4417 CROSSLINK?
 25047 CONJUGAT?
 L45 9 L33 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 FILE 'BIOTECHNO'
 173624 LINK?
 4956 CROSSLINK?
 24320 CONJUGAT?
 L46 10 L34 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 FILE 'WPIDS'
 444068 LINK?
 77310 CROSSLINK?
 44496 CONJUGAT?
 L47 21 L35 AND (LINK? OR CROSSLINK? OR CONJUGAT?)
 TOTAL FOR ALL FILES

L48 188 L36 AND (LINK? OR CROSSLINK? OR CONJUGAT?)

=> s l48 not 1999-2005/py

FILE 'MEDLINE'

3325502 1999-2005/PY

L49 5 L37 NOT 1999-2005/PY

FILE 'SCISEARCH'

6385167 1999-2005/PY

L50 8 L38 NOT 1999-2005/PY

FILE 'LIFESCI'

647543 1999-2005/PY

L51 3 L39 NOT 1999-2005/PY

FILE 'BIOTECHDS'

126993 1999-2005/PY

L52 0 L40 NOT 1999-2005/PY

FILE 'BIOSIS'

3277108 1999-2005/PY

L53 5 L41 NOT 1999-2005/PY

FILE 'EMBASE'

2914482 1999-2005/PY

L54 5 L42 NOT 1999-2005/PY

FILE 'HCAPLUS'

6178020 1999-2005/PY

L55 15 L43 NOT 1999-2005/PY

FILE 'NTIS'

108997 1999-2005/PY

L56 1 L44 NOT 1999-2005/PY

FILE 'ESBIOBASE'

1817014 1999-2005/PY

L57 1 L45 NOT 1999-2005/PY

FILE 'BIOTECHNO'

611346 1999-2005/PY

L58 4 L46 NOT 1999-2005/PY

FILE 'WPIDS'

5325720 1999-2005/PY

L59 1 L47 NOT 1999-2005/PY

TOTAL FOR ALL FILES

L60 48 L48 NOT 1999-2005/PY

=> dup rem l60

PROCESSING COMPLETED FOR L60

L61 21 DUP REM L60 (27 DUPLICATES REMOVED)

=> d tot

L61 ANSWER 1 OF 21 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN DUPLICATE 1

TI An Os(byp)(2)ClPyCH(2)NHpoly(allylamine) hydrogel mediator for enzyme
wiring at electrodes

SO ELECTROCHIMICA ACTA, (JAN 1998) Vol. 43, No. 23, pp. 3525-3531.

Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE,
KIDLINGTON, OXFORD OX5 1GB, ENGLAND.

ISSN: 0013-4686.

AU Danilowicz C (Reprint); Corton E; Battaglini F; Calvo E J
AN 1998:675541 SCISEARCH

L61 ANSWER 2 OF 21 MEDLINE on STN DUPLICATE 2
TI Combined use of carboxyl-directed protein pegylation and vector-mediated
blood-brain barrier drug delivery system optimizes brain uptake of
brain-derived neurotrophic factor following intravenous administration.
SO Pharmaceutical research, (1998 Apr) 15 (4) 576-82.
Journal code: 8406521. ISSN: 0724-8741.
AU Pardridge W M; Wu D; Sakane T
AN 1998249553 MEDLINE

L61 ANSWER 3 OF 21 MEDLINE on STN DUPLICATE 3
TI Amino acids and peptides. XXXVIII. A bifunctional poly(ethylene glycol)
hybrid of laminin-related peptides.
SO Biochemical and biophysical research communications, (1998 Jul 30) 248 (3)
485-9.
Journal code: 0372516. ISSN: 0006-291X.
AU Maeda M; Kawasaki K; Mu Y; Kamada H; Tsutsumi Y; Smith T J; Mayumi T
AN 1998369575 MEDLINE

L61 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Nonimmunogenic MHC-blocking peptides
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
IN Wiley, Don C.; Bouvier, Marlene
AN 1997:145226 HCAPLUS
DN 126:139883

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9700084	A1	19970103	WO 1996-US10396	19960614
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

L61 ANSWER 5 OF 21 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Immobilisation and release of hydroxylic compounds, e.g. oligo
nucleotide(s) - using **linker** compound containing protected
amine which, when deprotected, attacks intramolecular phosphate tri ester.
PI US 5688940 A 19971118 (199801)* 9 C07H021-00
IN LYTTLE, M H

L61 ANSWER 6 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Phospholipid derivatized with **peg bifunctional linker** and liposome containing it.
SO Official Gazette of the United States Patent and Trademark Office Patents,
(Sept. 17, 1996) Vol. 1190, No. 3, pp. 2098. print.
CODEN: OGUPE7. ISSN: 0098-1133.
AU Tagawa, T. [Inventor]; Awane, K. [Inventor]; Nagaike, K. [Inventor]
AN 2002:49522 BIOSIS

L61 ANSWER 7 OF 21 MEDLINE on STN DUPLICATE 4
TI Interactions and applications of soluble heterobifunctional affinity
chelating polymers in immobilized metal affinity chromatography.
SO Journal of molecular recognition : JMR, (1996 Sep-Dec) 9 (5-6) 733-7.
Journal code: 9004580. ISSN: 0952-3499.
AU Ehteshami G; Porath J; Guzman R
AN 97317982 MEDLINE

L61 ANSWER 8 OF 21 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN DUPLICATE 5
TI FIBROBLAST AGGREGATION BY SUSPENSION WITH **CONJUGATES** OF
POLY(ETHYLENE GLYCOL) AND RGD
SO BIOTECHNOLOGY AND BIOENGINEERING, (20 MAY 1996) Vol. 50, No. 4, pp.
349-356.

ISSN: 0006-3592.

AU DAI W G; SALTZMAN W M (Reprint)
AN 96:326901 SCISEARCH

L61 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics and mechanisms of multifunctional monomer photopolymerizations
SO Polymeric Materials Science and Engineering (1996), 75, 202-203
CODEN: PMSEDG; ISSN: 0743-0515
AU Anseth, Kristi S.
AN 1996:498087 HCAPLUS
DN 125:168731

L61 ANSWER 10 OF 21 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI CROSS-**LINKED** POLY(ETHYLENE OXIDE) FOR DRUG-RELEASE SYSTEMS
SO MACROMOLECULAR SYMPOSIA, (JAN 1996) Vol. 103, pp. 193-211.
ISSN: 1022-1360.
AU BELCHEVA N (Reprint); STAMENOVA R; TSVETANOV C; LAMBOV N; TSANKOV S; SMID
J
AN 96:151445 SCISEARCH

L61 ANSWER 11 OF 21 LIFESCI COPYRIGHT 2005 CSA on STN
TI Phospholipid derivatized with **PEG bifunctional linker** and liposome containing it
SO (19960917) . US Patent 5556948; US Cl. 530/391.9 424/178.1 424/450
530/391.1 548/119.
AN 97:108487 LIFESCI

L61 ANSWER 12 OF 21 NTIS COPYRIGHT 2005 NTIS on STN
TI Multifunctional Acrylates and the Synthesis Thereof. Patent.
NR PB95-178448/XAB; PAT-APPL-7-828 316, PATENT-5 380 901
7p; Filed 30 Jan 92, patented 10 Jan 95
PD 19950110
AU Antonucci, J. M.; Stansbury, J. W.; Cheng, G. W.
AN 1995(17):03702 NTIS

L61 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Gels containing cells for augmenting tissues
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2

IN Estridge, Trudy D.; Rao, Prema R.
AN 1995:969690 HCAPLUS
DN 123:350408

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
PI WO 9526761	A1	19951012	WO 1995-US3991	19950331
W: AU, BR, CA, CN, JP, MX, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2187109	AA	19951012	CA 1995-2187109	19950331
AU 9522029	A1	19951023	AU 1995-22029	19950331
AU 682266	B2	19970925		
EP 754065	A1	19970122	EP 1995-914983	19950331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10501706	T2	19980217	JP 1995-525855	19950331

L61 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Activity and Stability of Enzymes Incorporated into Acrylic Polymers
SO Journal of the American Chemical Society (1995), 117(17), 4843-50
CODEN: JACSAT; ISSN: 0002-7863
AU Yang, Zhen; Mesiano, Anita J.; Venkatasubramanian, Srikanth; Gross, Susan
H.; Harris, J. Milton; Russell, Alan J.
AN 1995:520854 HCAPLUS
DN 123:78410

L61 ANSWER 15 OF 21 MEDLINE on STN . DUPLICATE 6
 TI Cell-binding peptides **conjugated** to poly(ethylene glycol)
 promote neural cell aggregation.
 SO Bio/technology (Nature Publishing Company), (1994 Aug) 12 (8) 797-801.
 Journal code: 8309273. ISSN: 0733-222X.
 AU Dai W; Belt J; Saltzman W M
 AN 94318246 MEDLINE

L61 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Novel heterobifunctionalized polystyrene-polyethylene glycol resin for
 simultaneous preparation of free and immobilized peptides and biological
 activity detected by confocal microscopy
 SO Letters in Peptide Science (1994), 1(3), 117-26
 CODEN: LPSCEM; ISSN: 0929-5666
 AU Fleckenstein, Burkhard; Wiesmueller, Karl-Heinz; Brich, Manfred; Jung,
 Guenther
 AN 1995:390436 HCAPLUS
 DN 122:315066

L61 ANSWER 17 OF 21 MEDLINE on STN DUPLICATE 7
 TI AUR Memorial Award 1993. A drug system (PDH) for interventional radiology.
 Synthesis, properties, and efficacy.
 SO Investigative radiology, (1993 Dec) 28 (12) 1083-9.
 Journal code: 0045377. ISSN: 0020-9996.
 AU Weissleder R; Bogdanov A; Frank H; Nossiff N; Bogdanova A; Schaffer B K;
 Brady T; Wittenberg J
 AN 94140526 MEDLINE

L61 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI A **crosslinked** polyether solid electrolyte film made by one-step
 reaction at room temperature
 SO Gaofenzi Cailiao Kexue Yu Gongcheng (1993), 9(5), 122-6
 CODEN: GCKGEI; ISSN: 1000-7555
 AU Xia, Duwei; Zhang, Zhaoxi; Hou, Xinping
 AN 1994:299924 HCAPLUS
 DN 120:299924

L61 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Novel hydrophilic and hydrophobic acrylic monomers and oligomers for
 dental and medical applications
 SO Polymer Preprints (American Chemical Society, Division of Polymer
 Chemistry) (1992), 33(2), 522-3
 CODEN: ACPPAY; ISSN: 0032-3934
 AU Antonucci, J. M.; Sansbury, J. W.; Cheng, G. W.
 AN 1994:165612 HCAPLUS
 DN 120:165612

L61 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of polyethylene glycol derivatives with two different
 functional groups at the termini
 SO Polymer Preprints (American Chemical Society, Division of Polymer
 Chemistry) (1986), 27(1), 1-2
 CODEN: ACPPAY; ISSN: 0032-3934
 AU Zalipsky, Shmuel; Barany, George
 AN 1986:406904 HCAPLUS
 DN 105:6904

L61 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Combustion inhibitor for gas-producing charges
 IN Bohn, James N.; Sandhoff, Allan G.
 AN 1959:14076 HCAPLUS
 DN 53:14076
 OREF 53:2627a-c,2628a
 PATENT NO. KIND DATE APPLICATION NO. DATE

FILE 'ESBIOBASE'
L70 19 HETEROFUNCTIONAL

FILE 'BIOTECHNO'
L71 17 HETEROFUNCTIONAL

FILE 'WPIDS'
L72 52 HETEROFUNCTIONAL

TOTAL FOR ALL FILES
L73 624 HETEROFUNCTIONAL

=> s 112 and 173

FILE 'MEDLINE'
L74 8 L1 AND L62

FILE 'SCISEARCH'
L75 10 L2 AND L63

FILE 'LIFESCI'
L76 0 L3 AND L64

FILE 'BIOTECHDS'
L77 1 L4 AND L65

FILE 'BIOSIS'
L78 5 L5 AND L66

FILE 'EMBASE'
L79 5 L6 AND L67

FILE 'HCAPLUS'
L80 21 L7 AND L68

FILE 'NTIS'
L81 0 L8 AND L69

FILE 'ESBIOBASE'
L82 3 L9 AND L70

FILE 'BIOTECHNO'
L83 4 L10 AND L71

FILE 'WPIDS'
L84 6 L11 AND L72

TOTAL FOR ALL FILES
L85 63 L12 AND L73

=> s 185 not 1999-2005/py

FILE 'MEDLINE'
3325502 1999-2005/PY
L86 1 L74 NOT 1999-2005/PY

FILE 'SCISEARCH'
6385167 1999-2005/PY
L87 2 L75 NOT 1999-2005/PY

FILE 'LIFESCI'
647543 1999-2005/PY
L88 0 L76 NOT 1999-2005/PY

FILE 'BIOTECHDS'
126993 1999-2005/PY

L89 0 L77 NOT 1999-2005/PY

FILE 'BIOSIS'

3277108 1999-2005/PY

L90 1 L78 NOT 1999-2005/PY

FILE 'EMBASE'

2914482 1999-2005/PY

L91 1 L79 NOT 1999-2005/PY

FILE 'HCAPLUS'

6178020 1999-2005/PY

L92 3 L80 NOT 1999-2005/PY

FILE 'NTIS'

108997 1999-2005/PY

L93 0 L81 NOT 1999-2005/PY

FILE 'ESBIOBASE'

1817014 1999-2005/PY

L94 0 L82 NOT 1999-2005/PY

FILE 'BIOTECHNO'

611346 1999-2005/PY

L95 1 L83 NOT 1999-2005/PY

FILE 'WPIDS'

5325720 1999-2005/PY

L96 0 L84 NOT 1999-2005/PY

TOTAL FOR ALL FILES

L97 9 L85 NOT 1999-2005/PY

=> dup rem 197

PROCESSING COMPLETED FOR L97

L98 4 DUP REM L97 (5 DUPLICATES REMOVED)

=> d tot

L98 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Incorporation of **PEG**-proteins into polymers.

SO Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), POLY-182 Publisher: American Chemical Society, Washington, D. C. CODEN: 64AOAA

AU LeJeune, K. E.; Panza, J.; Russell, A. J.

AN 1997:164107 HCAPLUS

L98 ANSWER 2 OF 4 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 1

TI Incorporation of poly(ethylene glycol) proteins into polymers

SO ACS SYMPOSIUM SERIES, (FEB 1997) Vol. 680, pp. 134-144. Publisher: AMER CHEMICAL SOC, 1155 SIXTEENTH ST NW, WASHINGTON, DC 20036. ISSN: 0097-6156.

AU Panza J L (Reprint); LeJeune K E; Venkatasubramanian S; Russell A J

AN 1998:12667 SCISEARCH

L98 ANSWER 3 OF 4 MEDLINE on STN DUPLICATE 2

TI Selective production of hybridoma cells: antigenic-based pre-selection of B lymphocytes for electrofusion with myeloma cells.

SO Biochimica et biophysica acta, (1990 Dec 10) 1055 (3) 199-206. Journal code: 0217513. ISSN: 0006-3002.

AU Tomita M; Tsong T Y

AN 91091428 MEDLINE